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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/829,197	04/09/2001	Thomas R. Giallorenzi	907.0013USU	6842
29683	7590	12/08/2004	EXAMINER	
HARRINGTON & SMITH, LLP			CHOU, ALBERT T	
4 RESEARCH DRIVE			ART UNIT	
SHELTON, CT 06484-6212			PAPER NUMBER	
			2662	

DATE MAILED: 12/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/829,197

Applicant(s) **A**

GIALLORENZI ET AL.

Examiner

Albert T. Chou

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04-09-2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04-09-2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1 - 27 are rejected under U.S.C. 102(b) as being anticipated by Watanabe et al. (US Patent Number: 5,802,110) hereinafter referred to as Watanabe.
3. Regarding claims 1 and 14, Watanabe teaches a communication system, comprising a Base Station 51 (figure 4) and Mobile Stations 71 (figure 5), uses a carrier frequency f2 (figure 6; col. 6, lines 19-28) for the signal transmission through a forward link (col. 6, lines 9-11) from the Base Station 51 to the Mobile Station 71 (*the forward link operating at a first frequency that is transmitted by the BS and received by the SS*) and another carrier frequency f1 (figure 6; col. 6, lines 19-28) for the signal transmission through a reverse link from the Mobile Station 71 to the Base Station 51 (*the reverse link operating at a second frequency that is transmitted by the SS and received by the BS*). Watanabe also teaches the forward link and reverse link operate with Modulator 53, Spreader 54 and Demodulator 63 in Base Station 51 (figure 4; col. 6, lines 49-59) and Modulator 83, Spreader 85 and Demodulator 80 in Mobile station 71 (figure 5;

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col. 8, lines 1-12; col. 7, lines 47-58) (*forward link and reverse link operate with a common waveform and signal processing circuitry in the BS and one of the SSs*).

4. Regarding claims 2 and 15, Watanabe teaches (figures 5-6; col. 8, lines 14-22) the First Carrier Generator 88 and the Second Carrier Generator 89 can generate desired carrier as needed (*enabling one of the said SSs to function as a BS by transmitting on the first frequency and receiving on the second frequency*).

The Change-over Switch 90 (figure 5; col. 8 lines 16-19) changes over these carriers (*providing switching circuitry for cross-connecting RF signal path*).

5. Regarding claims 3 and 16, Watanabe teaches the forward link and reverse link operate with Modulator 53, Spreader 54 and Demodulator 63 in Base Station 51 (figure 4; col. 6, lines 49-59) and Modulator 83, Spreader 85 and Demodulator 80 in Mobile station 71 (figure 5; col. 8, lines 1-12; col. 7, lines 47-58) (*common waveform enables essential parameters of the forward link and reverse link to the same*).

6. Regarding claims 4 and 17, Watanabe teaches Base Station 51 comprising Modulator 53 and Demodulator 63 (figure 4; col. 6, lines 49-59) and Mobile Station 71 comprising Modulator 83, Spreader 85 and Demodulator 80 respectively (figure 5; col. 8, lines 1-12; col. 7, lines 47-58) (*essential parameters comprise a modulation format*).

7. Regarding claims 5 and 18, Watanabe teaches Base Station 51 comprising spreader 54 (figure 4) and Mobile Station 71 (figure 5) comprising Spreader 85 respectively (*essential parameters comprise a chip rate*).

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8. Regarding claims 6 and 19, Watanabe teaches Base Station 51 comprising Modulator 53, Spreader 54 and Demodulator 63 (figure 4; col. 6, lines 49-59) and Mobile Station 71 (figure 5; col. 8, lines 1-12; col. 7, lines 47-58) comprising Modulator 83, Spreader 85 and Demodulator 80 respectively (*essential parameters comprise a symbol rate*).

9. Regarding claims 7 and 20, Watanabe teaches Base Station 51 comprising Modulator 53, Spreader 54 and Demodulator 63 (figure 4; col. 6, lines 49-59) and Mobile Station 71 (figure 5; col. 8, lines 1-12; col. 7, lines 47-58) comprising Modulator 83, Spreader 85 and Demodulator 80 respectively (*essential parameters comprise a bit rate*).

10. Regarding claims 8 and 21, Watanabe teaches Base Station 51 comprising Modulator 53, Spreader 54 and Demodulator 63 (figure 4; col. 6, lines 49-59) and Mobile Station 71 comprising Modulator 83, Spreader 85 and Demodulator 80 (figure 5; col. 8, lines 1-12; col. 7, lines 47-58) respectively (*essential parameters comprise a frame rate*).

11. Regarding claims 9 and 22, Watanabe teaches Base Station 51 comprising Modulator 53, Spreader 54 and Demodulator 63 (figure 4; col. 6, lines 49-59) and Mobile Station 71 (figure 5; col. 8, lines 1-12; col. 7, lines 47-58) comprising Modulator 83, Spreader 85 and Demodulator 80 respectively (*essential parameters comprise a superframe rate*).

12. Regarding claims 10 and 23, "*essential parameters comprising a frame structure*" is inherent in Watanabe. Watanabe teaches both Base Station 51 and Mobile Station 71 (figures 4-5), comprising Modulators 53 & 83 and Spreaders 54

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& 85 respectively, transmit and receive wireless signals. For this to occur, it is necessary to have signals to be transmitted or received in a frame structure before transmission.

13. Regarding claims 11 and 24, "*essential parameters comprise an error control coding scheme*" is inherent in Watanabe. Watanabe teaches both Base Station 51 and Mobile Station 71 (figures 4-5), comprising Modulators 53 & 83 and Spreaders 54 & 85 respectively, transmit and receive wireless signals. For this to occur, it is necessary to have signals to be transmitted or received in a frame structure, including error control coding field for the receiver to detect and correlate the received signals correctly (figure 4, Correlation Detector; figure 5, Correlation Detectors 75 & 76).

14. Regarding claims 12 and 25, Watanabe teaches (figure 5; col. 7, lines 51-58) the Mobile Station 71 comprising Synchronization Circuit 79 (*essential parameters comprise synchronization words*).

15. Regarding claims 13 and 26, "*essential parameters comprise a control field structure*" is inherent in Watanabe. Watanabe teaches both Base Station 51 and Mobile Station 71 (figures 4-5), comprising Modulators 53 & 83 and Spreaders 54 & 85 respectively, transmit and receive wireless signals. For this to occur, it is necessary for Base Station 51 and Mobile Station 71 to have signals to be transmitted in a frame structure, including various control fields in order for the receiver to detect and correlate the received signals correctly (figure 4, Correlation Detector; figure 5, Correlation Detectors 75 & 76).

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16. Regarding claim 27, Watanabe teaches a synchronous code division access communication system comprising a Base Station 51 (figure 4) and Mobile Stations 71 (figure 5), and further comprising a carrier frequency f_2 (figure 6; col. 6, lines 19-28) for the signal transmission through a forward link (col. 6, lines 9-11) from the Base Station 51 to the Mobile Station 71 (*the forward link operating at a first frequency that is transmitted by the BS and received by the SS*) and another carrier frequency f_1 (figure 6; col. 6, lines 19-28) for signal transmission through a reverse link from the Mobile Station 71 to the Base Station 51 (*the reverse link operating at a second frequency that is transmitted by the SS and received by the BS*). Watanabe also teaches the forward link and reverse link operate with Modulator 53, Spreader 54 and Demodulator 63 in Base Station 51 (figure 4; col. 6, lines 49-59) and Modulator 83, Spreader 85 and Demodulator 80 in Mobile station 71 (figure 5; col. 8, lines 1-12; col. 7, lines 47-58) (*forward link and reverse link operate with a common waveform and signal processing circuitry in the BS and one of the SSs*). Watanabe further teaches the Change-over Switch 90 (figure 5; col. 8 lines 16-19) changes over carriers (*providing switching circuitry for cross-connecting RF signal path*) so that the First Carrier Generator 88 and the Second Carrier Generator 89 can generate desired carrier as needed (figures 5-6; col. 8, lines 14-22) (*enabling one of the said SSs to function as a BS by transmitting on the first frequency and receiving on the second frequency, wherein said SS functions as one of the point-to-multiple pseudo-BS or as a point-to-point pseudo BS*).

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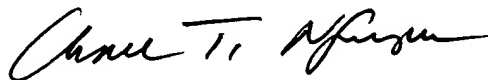
17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Albert T. Chou whose telephone number is 571-272-6045. The examiner can normally be reached on 8:30 - 17:00. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizooou can be reached on 571-272-3088. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AC

Albert Chou

December 1, 2004



CHAU NGUYEN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600